Digital FM/AM Receiver

Model RM-350D



User's Guide

54-5021-01
9609
Printed in USA

Specifications

Band Coverage	
AM	530 - 1620KHz
FM	87.5 - 107.9MHz
Tuning	PLL Synthesizer
Channel Indicator	LCD panel
Memory Presets	18 - FM; 12 - AM
Memory Scan	Preset stations
Power Rating (RMS)	35W
Audio Frequency Response	20Hz to 20KHz Direct 70Hz to 15KHz Transformer
Audio Sensitivity	Aux - 80mV; Lo-Z Mic - 750µV
Microphone Input	Balanced Lo-Z; XLR-312C
Aux Input	RCA jack accepts signal from CD, tape deck or other line-level source
Pre Page Output	RCA Jack
Tape Output	RCA Jack
Output Taps	4/8Ω, 25V, 70V
ALC	Switch selected
Mic Precedence	Dry contact (normally open) Internal jumper selects normally open/normally closed
Speaker Zones	Selected by pushbuttons 4 individual plus 1 All Call
Program Selection	Pushbutton
Antenna Connectors	FM - 75Ω, 300Ω, AM
AC Power Required	120VAC nominal @ 60Hz, 98W
Dimensions	12.05” x 8.46” x 3.43”
Shipping Weight	13 lbs., 2 oz.
Accessories Included	AM Loop , FM Dipole, Mono Patch Cord
Rack Kit Available	Model RPK47

Before You Begin

Your Bogen RM-350D Digital Tuner/Receiver incorporates the latest in PLL digital circuitry for reliable performance for years to come. To get the maximum benefit from your Bogen product, please read all instructional materials provided with the unit.

Unpacking

The RM-350D is carefully checked before leaving the factory. Inspect the shipping carton and unit for damage caused by improper handling. If damage is found you must file a claim with the transportation company that delivered the product.

Warning

To Prevent Fire or Shock Hazard, Do Not Expose This Appliance to Rain or Moisture.

Make all connections with the power OFF

Antenna Connection

FM Dipole Antenna

The indoor dipole antenna provided should be adequate for normal FM reception.

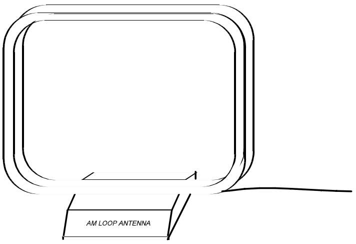
1. Connect the antenna leads to the two terminals marked **300 OHM BAL**.
2. Move the antenna around to determine the best reception; tack it to a wall or baseboard, if possible.

For reception where the unit is installed in a rack, an external antenna installed in accordance with National Electric Codes, is required. **Either:**

a) Connect the external antenna leads to the **300 OHM BAL** terminals.

b) For applications using coaxial cable, a **75 OHM** coaxial cable connector is provided.

AM Loop Antenna



The RM350D is provided with an external AM antenna for AM reception.

1. Carefully pull the antenna lead from the holding notch in the antenna and unwind the lead from the loop.
2. Connect the antenna leads to the terminals marked **AM ANT**.
3. Fold the antenna so that it snaps into the base forming a free-standing unit (see diagram).
4. Position the antenna for best reception. If desired, the antenna may be permanently mounted using screws through the two holes in the base.

Microphone Connection

Connect a Lo-Z microphone to the 3-pin connector marked MIC BAL on the rear panel. **Be sure to observe correct polarity: Pin 1 is GND, pins 2 & 3 are signal.** A VOX circuit activates the microphone.

Music Muting

Speaking into the microphone will automatically mute the aux or tuner output. Muting can also be accomplished by shorting the two terminals labeled AUX MUTE on the rear panel with a microphone having a normally open push to talk switch.

Procedure To Change Aux Mute Activation

The unit may also be configured to operate with a microphone having a normally closed switch by following the procedure below:

Caution

The following procedure requires removal of protective covers, presenting an electrical shock hazard. Do not perform this procedure unless you are qualified to do so.

1. **Unplug the unit from electrical source.**
2. Remove eight (8) screws securing the unit cover to the chassis.
3. Slide cover back to remove it from chassis.
4. Locate Jumper J1 on the circuit board (right side of the unit as you look at it from front panel).
5. Reposition jumper from CLOSED position to OPEN position.
6. Reinstall cover and screws.

Microphone ALC (Automatic Level Control)

An ALC switch on the rear panel controls the ALC circuit. When "ON," the ALC will maintain a consistent level between various microphone users

AUX Input

Connect an Aux source to the RCA jacked marked AUX.

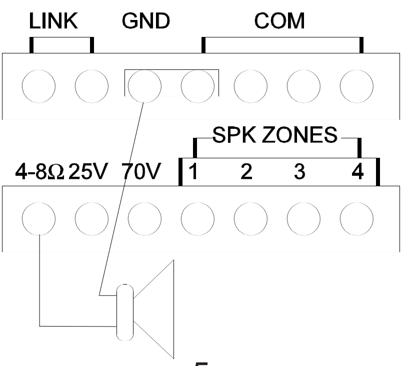
PREPAGE OUT

The prepage output lets you route tuner and auxiliary input to a telephone music-on-hold input. The output is also independent of the tone and volume controls.

Speaker Connections

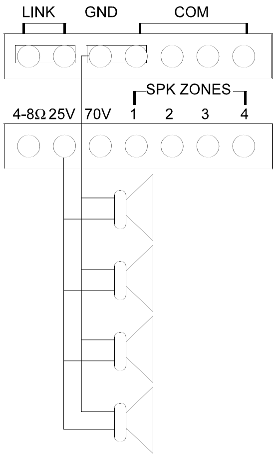
4-8Ω Direct Connection

You can connect a 4-8Ω speaker to the terminals marked 4-8Ω and GND as shown below. **Remove the LINK for 4-8Ω unbalanced output.**



25V & 70V Connection

You can connect a 25 or 70V balanced or unbalanced line to the terminals marked 25V or 70V and GND. 25V line connection is shown below.



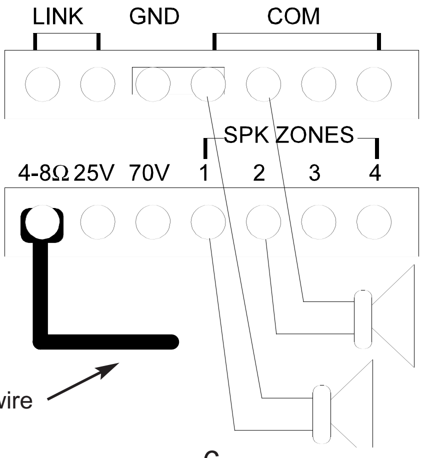
Speaker Zone Connection

You can connect up to 4 separate speaker zones.

To connect zones of 4 - 8Ω speakers: Connect the impedance selector jumper wire to the 4-8Ω terminal. **Remove the shorting bar between the LINK terminals**. **Connect one 8-ohm speaker to the desired zone terminal and COM, as shown below.**

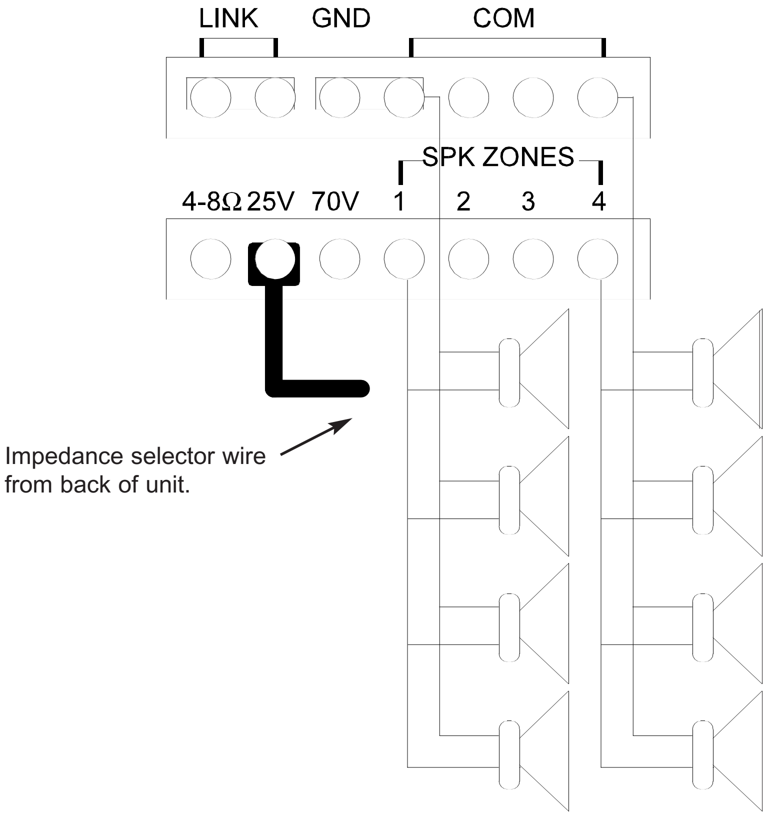
Connect only one 8-ohm speaker per zone.

For more than one speaker per zone, use 25V or 70V speakers.



Impedance selector wire from back of unit.

To connect zones using 25V or 70V line: Connect the impedance selector jumper to the 25V or 70V terminal. Connect the line to the desired zone terminal and COM as shown below.



Tape Out

You can connect a tape recorder to the RM350D using the Tape Out jack. This jack provides a line level output consisting of the signal being sent to the loudspeakers, that can also be used to drive another amplifier. All controls affect this output. Connect a mono patch cord to the jack marked TAPE/BOOSTER

Operation

Power
Press the front panel **POWER** switch to apply power. Adjust the volume to the appropriate level using the amplifier volume control.

To Select a Band
Press the button marked **BAND**. The current band appears on the display: FM1, FM2, FM3, AM1 or AM2.
You can preset up to six stations on each band for a total of 30 preset stations (18 FM and 12 AM).

To Tune a Station
Press the **UP** or **DOWN** buttons.

To Preset Stations
1. Select a band and tune the first desired station.
2. Press one of the "M" buttons; for example, M1 (The preset number appears on the display as CH1).
3. Continue pressing the "M" button until the program material from the speaker stops for a second and then resumes. This indicates that the preset is stored.
4. Tune the next station and repeat Steps 2 & 3 for the 2nd through 6th preset.

To Scan Preset Stations
1. Select a band. The first preset station (CH1) will appear on the display.
2. Press the button marked **MSCAN**. Each preset station will play for 5 seconds in turn while scanning.
3. To stop the scanning, press the "**MSCAN**" button again.

Program Selection
Use the AUX/TUNER button to select program from the tuner or aux source. Push in for Aux program. Push out for Tuner program

Microphone Volume
Use the MICROPHONE control to adjust mic volume.

Aux/Tuner Volume
The VOLUME control adjusts the output level of program from tuner and aux sources. It does not control the level of the microphone program.

Tone Controls
Use the BASS and TREBLE controls to adjust tonal balance of program from the tuner, microphone and Aux sources.

Speaker Zone Selection
Use the selector buttons labeled 1 - 4 to turn the output on or off for each zone. Use the ALL button to supply output to all zones, overriding individual selection buttons

Maintenance

CAUTION

There are no user serviceable parts within the tuner. To avoid an electric shock hazard, refer all internal servicing to qualified service personnel only.

The warranty will become void if repairs are made by other than the Bogen Factory Service Center.

We are interested in the maintenance of your Bogen equipment. In the event of any difficulty, do not hesitate to ask our advice or assistance. Information may be obtained by writing to the Service Department, Bogen Communications, Inc., P.O. Box 575, Ramsey, NJ 07446.

When communicating with us, please give the model number of your unit. Describe the difficulty encountered and include details on the electrical connections to associated equipment.

For warranty and repair information, please refer to the warranty registration card included with the unit.

BOGEN®

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